U.S. Department of Labor

Office of Administrative Law Judges
800 K Street, NW, Suite 400-N
Washington, DC 20001-8002

(202) 693-7300
(202) 693-7365 (FAX)

Issue Date: 20 January 2004

CASE NO.: 2002-LHC-2874
OWCP NO.: 01-135601

In the Matter of:

ANN MARIE FERRARO,
Claimant,

v.

ELECTRIC BOAT CORPORATION,
Self-Insured Employer.

DECISION AND ORDER

This proceeding arises from a claim under the Longshore and Harbor Workers' Compensation Act ("Act" or "LHWCA"), 33 U.S.C. § 901 *et seq*. Claimant is seeking a determination that injuries to her shoulder, neck, and thoracic outlet arose out of and in the course of her employment with Employer, and that she has been, and remains, totally disabled from September 24, 1996. Employer voluntarily paid temporary total disability compensation between September 24, 1996 to April 21, 2002, permanent partial disability compensation for Claimant's right hand and right arm disabilities from April 22, 2001 to February 21, 2002, and temporary partial compensation for May 7, 2002 to February 16, 2002.

A formal hearing was held in this case on March 25, 2003 in Middletown, Connecticut at which both parties were afforded a full opportunity to present evidence and argument as provided by law and applicable regulation. Claimant offered exhibits 1 through 24 which were admitted into evidence.[1] Employer offered exhibits 1 through 14 which were admitted into evidence. ALJX 1 through 3 were marked for identification and admitted into evidence without objection. One joint exhibit was offered by the parties and admitted into evidence. Both parties filed post-hearing briefs. The findings and conclusions which follow are based on a complete review of the entire record in light of the arguments of the parties, applicable statutory provisions, regulations, and pertinent precedent.

[1] The following abbreviations will be used as citations to the record: "CX" for Claimant's Exhibits, "EX" for Employer's Exhibits, "ALJX" for Administrative Law Judge Exhibits, "JX" for joint exhibits, and "Tr." for Transcript. CX 22 through 24 were submitted by Claimant post-hearing and are admitted without objection. Tr. 15. EX 13 and 14 were submitted by Employer post-hearing and are admitted without objection. Tr. 16.

STIPULATIONS

The parties have stipulated (Tr. 5-12, JX 1) and I find:

1. That the parties are subject to the Act.
2. That Claimant and Employer were in an employee-employer relationship at all relevant times.
3. That a timely notice of injury was given by Claimant to Employer.
4. That Claimant filed a timely claim for compensation.
5. That Employer filed a timely first report of injury and notice of controversion.
6. That there was voluntary payment of compensation by Employer as follows:

> Temporary total compensation at $233.62 per week from September 24, 1996 through April 21, 2001 totaling $55,668.31
>
> Permanent Partial compensation at $233.62 per week, 5% right hand, 10% right arm, from April 22, 2001 through February 21, 2002 totaling $10,139.11.
>
> Temporary partial compensation at $25.31 per week from May 7, 2002 through December 16, 2002 totaling $809.92.

7. That Claimant suffered injuries to the right hand, right wrist, and right elbow, which injuries arose out of and in the course of Claimant's employment.
8. That Claimant's average weekly wage is $337.96 and the compensation rate is $233.62.

ISSUES

Whether Claimant's neck and right shoulder injuries, and her thoracic outlet syndrome, arose out of and in the course of her employment?

Whether Claimant is totally disabled as a result of her work-related injuries?

FINDINGS OF FACT

Claimant, Anne Ferraro, is 37 years of age and graduated from high school in 1983. Tr. at 25. She has an associate's degree in business and began working at Electric Boat in 1988 having previously worked in a floral shop and as a teller in a bank. *Id.* at 25-26.

Electric Boat Corporation is in the business of building submarines on the navigable waters of the Thames River in Groton, Connecticut. *Id*. at 29-30.

After working for a few months in Department 459 in the Document Control Office, Claimant took a job in the same department in the Mechanical Design Office working for five supervisors, typing correspondences, updating manuals, answering telephone questions, and distributing mail. *Id*. at 27-28.

In April 1989, Claimant became an administrative clerk in the Safety and Industrial Hygiene Department. *Ibid*. The Industrial Hygiene Department at Electric Boat is responsible for investigating and inspecting boats and buildings throughout the shipyard. *Id*. at 29. Claimant testified that "[t]here were daily inspections of boats, weekly inspections of buildings . . . I had to type up the boat and building inspections. I then had to distribute throughout the shipyard accessing very seldom the boats." *Ibid*. Her workstation had a typewriter on the right hand side next to a computer and a telephone located to her left. When she simultaneously used the computer and telephone, she "crunched" the phone between her ear and shoulder to type and work at the same time. *Id*. at 31. While typing, she would answer phone calls concerning safety issues in the shipyard from employees, supervisors or "any number of people who had a concern." *Id*. at 32. Additional duties required her to make deliveries throughout the yard, onto the wet docks walking over gangplanks that actually went to the barge. *Ibid*. At times she had to go aboard the submarines with the engineers or hygienists so that if she subsequently received calls concerning a problem on one of the submarines she would understand what they were talking about and relay that information to the engineers. *Id*. at 33.

On April 2, 1993 Claimant went to the yard hospital with complaints of pain in her "right hand, arm, elbow and shoulder area . . . ." *Id*. at 34; CX-6. She had begun feeling "very, very uncomfortable," and told her supervisors about the problems she was experiencing. *Ibid*. Her complaints stemmed from the configuration of her workstation and her use of the typewriter, telephone, and computer. *Ibid*. The yard hospital report of Claimant's April 2, 1993 treatment reflects "pain in both hands, esp[ecially] the [right] hand which is painful to elbow and [right] shoulder" associated with "repeated trauma." CX-6. When the yard hospital asked Claimant if she wanted to see a doctor, she indicated the only one she knew at the time was Dr. Hallberg "and they said that was okay." Tr. at 35. She went to see Dr. Hallberg later on that month. *Ibid*.

A follow-up note from Dr. Hallberg dated April 22, 1993 noted complaints in both wrists, right elbow, and her shoulder. Dr. Hallberg "suspect[ed]" this was an "overuse tendonitis related to [Claimant's] typing," CX-7. He prescribed anti-inflammatory medication and wearing a wrist splint when her wrists were "bothering her more then (sic) usual." *Ibid*.

Claimant's activities of typing, answering the phone and deliveries subsequently increased due to layoffs in other departments. *Id*. at 35. According to a May 24, 1994 follow-up note, Dr. Hallberg recommended the continued use of splints and anti-inflammatories and possibly a cortisone shot if her condition worsened. CX-7.

An ergonomist at Electric Boat subsequently made a few recommendations to Claimant regarding her workstation to alleviate her condition, such as putting a pad underneath the computer and elevating the typewriter. Tr. at 38. Unfortunately the phone could not be moved. *Id*. at 38-39. Claimant continued to work at the same work station until she was laid off in July of 1994. *Id*. at 39.

After being laid off from Electric Boat Claimant obtained other full-time employment from August of 1994 to January 1995 as a bank teller and then worked part-time because "it was

getting too uncomfortable." *Id*. at 40. Her shoulder problems continued to worsen after she left Electric Boat. *Ibid*.

Claimant's next job was as a school bus monitor and spare driver for Laidlaw in Hope Valley. She worked approximately 20 hours per week until November 1995. *Id*. at 41. She spent most of her time monitoring children who got on and off the bus but also drove the bus once a week. *Ibid*.

Dr. Cherry began treating Claimant for her right hand, elbow, and shoulder area in November, 1995. *Id*. at 42, CX-10. She was told by Dr. Cherry that she had "bilateral carpal tunnel, ulna[r] neuritis, and a possible double crunch." Tr. at 42, CX-10.

Claimant was subsequently referred by Dr. Cherry to Dr. Gaccione who saw her for her neck and shoulder condition. Electric Boat or National Employers paid those medical bills. *Id*. at 45; CX-13.

Dr. Gaccione referred Claimant to a physiatrist, Dr. Allcock, who treated her for her neck and shoulder. *Id*. at 46, CX-15. Ms. Ferraro does not take narcotic medication for pain so he worked with her on changing certain aspects of her daily living so that she did not end up with muscle wasting or other problems. *Id*. at 46-47.

Her surgery did not result in much improvement. *Id*. at 47. Over a three year period she had a total of five surgeries: 2 carpal tunnel, 2 ulnar nerve transpositions and a median nerve transposition, all on the right side. *Ibid*.

In 1997 Ms. Ferraro tried looking for jobs such as clerical work or working in a flower shop. *Id*. at 48. She also met with a representative from the Office of Workers' Compensation Programs, Carl Barchi, on October 21, 1997 to discuss what employment might be available for her given the restrictions imposed by her treating doctors. *Id*. at 50; CX-19, CX-24 at 7. In light of the fact that she had further surgery scheduled for January 28, 1998, Barchi told her to contact him after she reached maximum medical improvement. Tr. at 50.

Claimant testified that the problems with her shoulder persisted in 1999 and that her shoulder "was still very uncomfortable, burning, and it was almost like a muscle spasm and not on a constant basis." Tr. 51. She subsequently stated that "[i]t was there all the time. It was constant." *Ibid*. Dr. Gaccione referred her to Dr. Bellafiore who told her she had thoracic outlet syndrome. *Id*. at 51-52. All these appointments were paid for by National Employers and Electric Boat. *Id*. at 53.

Shortly after that she was referred to an orthopedist, Dr. Frank Maletz, for her shoulder and her neck. *Id*. at 52. Ms. Ferraro brought with her to her initial meeting with Dr. Maletz a list of medical issues corresponding to the dates, prepared by her counsel, because she has "ADD and a difficult time recalling these back dates." *Id*. at 53. She believed Dr. Maletz kept the list. *Ibid*. Dr. Maletz also took his own verbal history while going over the notes so he could get a better understanding of what was involved and when things occurred so he could make a better diagnosis. *Ibid*. Dr. Maletz recommended pain management through Dr. Hargas involving an

injection in her neck which only made her problems worse. *Id*. at 54. Ms. Ferraro believes Electric Boat paid for this examination as well. *Ibid*.

Dr. Maletz subsequently ordered an MRI at which time Ms. Ferraro was told that there was compression of the nerves feeding into the arms, particularly on the right side. *Id*. at 54-55. Dr. Maletz recommended physical therapy and a different type of pain management which was denied by Electric Boat. *Id*. at 56.

Ms. Ferraro did not lose any time from work from the time she visited the Yard Hospital on April 2, 1993 and when she was laid off in July 1994. *Id*. at 57. She initially complained of wrist pain due to working on a computer, and did not complain of neck pain until December 27, 1994 when she was working for the bank in Westerly, Rhode Island. *Id*. at 58.

When Claimant saw Dr. Hallberg in July 1995, she related her neck pain to her school activities. *Id*. at 59. She was then driving a school bus for handicapped children which required that she manually open and close the front door with a lever using her right arm. *Id*. at 60. An x-ray taken by Dr. Hallberg at that time was negative. *Id*. at 61.

An MRI of the neck done by Dr. Gaccione in March 1997 revealed degenerative disc disease. *Id*. at 62. Dr. Gaccione referred Claimant to Dr. Andrew Green in Providence, Rhode Island in 1998. *Ibid*.

When she saw Dr. Green on November 24, 1998, she told him she was having bilateral posterior shoulder and neck pain. *Id*. at 63. She believes that Dr. Green determined her neck and upper shoulder pain could not be attributed to her work activities at Electric Boat and that she was capable of performing modified work activities at that time. *Ibid*.

Claimant was sent for at least two examinations with Dr. Martin White of Shoreline Orthopedics in Essex, Connecticut. *Id*. at 64. She provided Dr. White with the same history of symptoms and treatment that she had given the other doctors. *Ibid*. Dr. White had a rather large file on her before she ever got there and some of the information was incorrect. *Ibid*. He did not discuss with her the results of her prior diagnostic testing. *Id*. at 64-65.

Claimant subsequently saw Dr. Maletz who sent her for an MRI. *Id*. at 65. The MRI showed a herniated disc. *Ibid*.

Claimant saw Dr. Mariorenzi at his office in Cranston, Rhode island. *Ibid*. She tried to provide Dr. Mariorenzi with a history of her job at Electric Boat but "[h]e was very, very, very sarcastic with me. He was very short." *Ibid*. He referred to Claimant at one point as "dearie" and he did not follow proper hygiene. *Id*. at 66.

Claimant was deposed by Employer's counsel in March 2002. *Ibid*. She testified at that time that she graduated from Westerly High School. *Ibid*. She subsequently obtained an Associate's Degree in Business at the Community College of Rhode Island after attending classes for four years both during the day and at night. *Id*. at 67-68. She has taken one correspondence course at home since leaving Electric Boat. *Id*. at 68. She attempted

unsuccessfully to find work in 1997, and she has not sought any type of employment since then. *Ibid*.

When Claimant saw Dr. Hallberg on April 22, 1993, she complained of pain in her wrists, right elbow, and sometimes in her shoulder, but mostly in her right wrist. *Id*. at 70, CX-7. She testified that she believes her shoulder starts at the nape of her neck and runs up to just below her ear. *Ibid*.

Dr. Mariorenzi would not take a history from her and told her "Don't interrupt me, wait until I finish my questions" when she tried to inform him that she no longer worked at Electric Boat. *Id*. at 71. She tried to describe the configuration of her work area to which he responded "That doesn't have anything to do with this situation." *Ibid*. Dr. Mariorenzi examined Claimant's spine, neck area, both arms, and both legs. *Id*. at 72.

MEDICAL TESTIMONY

Frank Maletz, M.D.

The deposition of Frank Maletz was taken on March 13, 2003. CX-23. He testified that he is a board-certified orthopedic surgeon and is the managing partner of Thames River Orthopaedic Group *Id*. at 4.

Dr. Maletz first examined Claimant on November 27, 2000. *Id*. at 5, CX-17. At that time, she had been seen by other physicians including Dr. Thomas Cherry, a plastic/hand surgeon, Dr. Hallberg, an orthopedist, Dr. Martin White, an orthopedist, and Dr. Gaccione, also an orthopedist, and she had had a number of surgeries. *Id*. at 6. Dr. Maletz performed an evaluation of Claimant's cervical spine and upper extremities. *Ibid*. It was his understanding that she had a number of difficulties with respect to her neck despite her surgeries and there was a need to have her neck and thoracic outlet evaluated. *Id*. at 7.

Dr. Maletz reviewed a variety of medical reports before the examination including a 1997 MRI scan ordered by Dr. Gaccione which reflected an impression of right arm radiculopathy. *Id*. at 7-8. The report "suggest[ed] that there was degenerative, what's called degenerative signal loss in disks C2, 3, 4, 5 and 6, with no herniation . . . [or] stenosis. And the cord, itself, looked satisfactory throughout the course." *Id*. at 8.

Another report Dr. Maletz reviewed was that of Dr. Peter Bellafiore, a neurologist, who saw Claimant in August 2000. *Id*. at 9. Dr. Bellafiore performed a thorough neurological examination and concluded that "her EMG report was positive for nerve damage to the flexor carpi ulnaris and the abductors of her hand." *Ibid*. He further concluded that the etiology of her pain was unclear and opined that her thoracic outlet syndrome "was potentially a problem." *Id*. at 10. Dr. Bellafiore's notes reflected that he performed a test ("Adson's maneuver") which confirmed a diagnosis of thoracic outlet syndrome. *Ibid*.

When asked to explain his understanding of the term "double crunch syndrome," Dr. Maletz testified that when a nerve becomes damaged somewhere along its course from any

source, such as trauma, pressure, or compression, the nerve becomes more susceptible to injury in another places along its course. *Id*. at 11. When the same nerve is subsequently injured elsewhere, "the nerve is even worse off than if it had those two injuries alone; and that is because of the susceptibility in the membrane of the nerve to other injuries." *Id*. at 12. Dr. Maletz agreed with Dr. Cherry's opinion that repetitive trauma is often considered a known causative factor in double crush syndrome. *Ibid*. He further agreed that someone who had damage to the nerve in the carpal tunnel area would be more susceptible to injury of the nerve in the upper extremity. *Id*. at 13.

During his initial evaluation on November 27th, Dr. Maletz took a history from Ms. Ferraro regarding her activities at Electric Boat. *Id*. at 14. Claimant could not recall having had any actual injury, such as an accident, laceration or nerve trauma to her upper extremity, but stated that her symptoms worsened over time after she engaged in work involving "typing related activities, computer screens and a lot of phone work . . . ." *Id*. at 14-15.

Dr. Maletz characterized Claimant's symptoms as resulting from "ergonomically-related repetitive microtrauma." *Id*. at 15. He stated that Claimant's description of her workstation "necessitated that she be in [a laterally flexed position with her neck positioned in such a way that her ear was closer to her shoulder], and she was constantly twisting in that position to – to be able to visualize the screen . . . which would have created an unbalancing of the way the neck work position ideally would have been – been handled." *Ibid*.

Dr. Maletz testified that he was previously involved in resolving a situation involving transcriptionists in the Radiology Department of a hospital at which he practiced after they began experiencing common symptoms of neck ache, headaches, and problems with the temperomandibular joints caused by the neck being twisted to look at their work stations. *Id*. at 18. He stated that the hospital had an ergonomic specialist in its Physical Therapy Department who rearranged the transcriptionists' work stations and that the problems subsequently resolved. *Ibid*.

During his initial evaluation of Claimant, Dr. Maletz examined her neck, back, arms, elbows and hands. *Id*. at 19. He confirmed Dr. Bellafiore's diagnosis of "very dramatic thoracic outlet syndrome . . . that was apparent bilaterally . . . and also felt that she had some significant problems with her neck, primarily because of the findings in the cervical spine and the upper shoulder area; and . . . was concerned about the neck as well." *Id*. at 20. Dr. Maletz described thoracic outlet syndrome as a condition which is "exactly the same as an ulnar nerve compression at the elbow or a median nerve compression at the wrist" but which involves a "plexus of nerves as opposed to a single nerve" in an area between the cervical spine to the shoulder *Ibid*. He further stated that compression of the nerve can occur at a couple of areas where the nerves branch down from the neck through the upper extremities. *Id*. at 20-21.

With respect to Claimant, Dr. Maletz testified "in this particular situation, the physical exam confirmed a second point of compression, such that, in answer to the question of why the surgeries hadn't worked, when it looked like, in fact, she did have compression in the carpal, as well as the ulnar area, so that was helpful information, diagnostically. And then, secondly, it led us to another area of potential treatment, that is the shoulder and the neck." *Id*. at 22. He further

stated that thoracic outlet syndrome can be caused by a variety of anatomical, biomechanical, and postural conditions, including repetitive and postural conditions at work which cause nerve compression. *Id*. at 23.

Dr. Maletz's initial recommendation for further treatment was pain management and physical therapy to try to get the nerves under control. *Ibid*. He also wanted an x-ray to make certain that the condition was not a result of a cervical rib condition. *Ibid*. The x-ray revealed Claimant did not have a cervical rib and she did attend one session of pain management with Dr. Edward Hargus where an epidural steroid injection was performed in the cervical area to control pain in the neck outwards toward the plexor. *Id*. at 23-24. The epidural did not have the desired effect, and it was not performed again. *Id*. at 24-25.

When Dr. Maletz examined Claimant again on March 7, 2001, he found her to be cooperative, answering whatever questions he had, and believed she was consistent in her reporting of information concerning her condition. *Id*. at 25-26. Because of the continued bilateral upper extremity symptoms and increased levels of pain Claimant was then having, Dr. Maletz ordered another MRI of the neck *Id*. at 27. He found Claimant's complaints as being consistent with cervical and thoracic outlet symptomology whereby symptoms began at the neck and went outwards toward the shoulders. *Id*. at 28.

Dr. Maletz next saw Ms. Ferraro on August 15, 2001 after obtaining the MRI. *Ibid*. He reviewed the MRI films himself and also had a report of the MRI from Dr. Robbins, a neuroradiologist, which he reviewed before examining Ms. Ferraro again. *Id*. at 29. In his opinion the MRI revealed that the vertebral bodies were normal and there was no pressure on the cervical cord or the base of the brain, but the disks were abnormal at the C5-6 level with signs of protruded disk material and disk changes were still noted at C2-3, 3-4, and 4-5 which had been seen on the earlier MRI in 1997. *Id*. at 29-30. In light of the number of disk levels affected, Dr. Maletz recommended treatment involving "tractioning to lift the weight of the head off the disks and begin to give her a little more room in the cervical canal, especially at that 5-6 level." *Id*. at 30. Treatment notes from January and March 2002 reflect that Claimant's employer had not approved the traction despite his having prescribed it. *Id*. at 32. Other records reflect that treatment of Claimant's cervical and thoracic region symptoms were paid by General Dynamics. *Id*. at 32.

According to Dr. Maletz's January 9, 2002 treatment note, Claimant continued to suffer from compressive neuropathies and cervical syndrome at that time, and her neck condition dated back to 1994. *Id*. at 34-35, CX-17. She also demonstrated some loss of range of motion in the extension of her neck. *Id*. at 37. He recommend continued treatment with conservative care, physical therapy, and home traction. *Id*. at 36.

On March 6, 2002, Dr. Maletz saw Claimant again and noted she was still experiencing pain with some changes in her range of motion in the cervical spine, including loss of extension. *Id*. at 36-37. He strongly recommended physical therapy and cervical traction. *Id*. at 37. In Dr. Maletz's opinion, the failure to receive prescribed treatment hastened the rate of loss of disk height which in turn limited the range of motion in Claimant's cervical spine. *Id*. at 38-39.

Dr. Maletz saw Claimant again on April 17, 2002. *Id*. at 39. His treatment notes reflect that she was experiencing left elbow problems, which Dr. Maletz attributed to the left of center disk protrusion at C5-6 into "the nerve root distribution which would refer pain to her elbow." *Id*. at 40. Dr. Maletz continued to recommend physical therapy but also suggested to Claimant that she consider epidural steroid injections again to decrease the impingement of the nerve root. *Ibid*. Dr. Maletz also recommended that Claimant return to Dr. Cherry. *Id*. at 41.

Claimant saw Dr. Maletz next on August 23, 2002. *Ibid*. That examination revealed that there was no marked decrease in her neurological function but Claimant was experiencing quite a bit of neck and shoulder symptomatology. *Id*. at 42. Dr. Maletz recommend an MRI of Claimant's right shoulder. *Ibid*. Claimant had specifically mentioned her shoulder when seen at the Yard Hospital on April 3, 1993. *Ibid*.

The MRI recommended by Dr. Maletz was approved and performed on October 22, 2002. *Id*. at 43. The test revealed no degenerative arthritis or rotator cuff tear but showed tendonitis in the anterior portion of the shoulder of the subscapular tendon, which is in the area of the thoracic outlet. *Ibid*. Dr. Maletz opined that inflamed tissue in the front and lower part of the shoulder would contribute to some irritation in the nerve distribution as well. *Ibid*. His October 22, 2002 office note does not reflect any range of motion information regarding the cervical spine because he was focusing on her right shoulder complaints since that was her principal complaint at the time. *Id*. at 44.

In December 2002 when Dr. Maletz last saw Ms. Ferraro, he again recommended more epidural steroids and facet blocks in the neck since he was not recommending surgery to either the shoulder or the neck at the time. *Ibid.* He believed that Claimant's neck condition was the source of her shoulder pain. *Ibid*. He continued to recommend cervical traction and epidural steroids. *Id*. at 45. Dr. Maletz's diagnosis of Claimant after two years of treatment was "multilevel cervical degenerative disk disease with a protruded C5-6 disk[,] . . . thoracic outlet compression, bilaterally, and subscapularis tendonitis . . . ." *Id*. at 46. He believed, based on a reasonable degree of medical probability, that Claimant's activities at work during the period 1988 to 1993 were "causative" of her problems. *Id*. at 45-46. He did not believe that Claimant had reached maximum medical improvement with respect to her upper extremity areas and cervical region, nor did he believe that Claimant could return to her regular course of work performing clerical or secretarial functions. *Id*. at 47. In Dr. Maletz's opinion, Claimant continued to be "totally disabled from work in the clerical area." *Id*. at 48. He recommended she avoid repetitive use of her arms and overhead work, and further recommended that she curtail certain activities such as excessive driving, vacuuming, and other household activities that might aggravate her symptoms. *Ibid*. Dr. Maletz further believed that Claimant should limit her activities to avoid the repetitive use of her hands given her neck, shoulder, and upper extremity condition. *Id*. at 49. Dr. Maletz believed that the deterioration of the spinal discs would be hastened, especially at the C5-6 level, and that the weakened condition of that disk could result in herniation requiring surgery if Claimant does not receive the treatment he has recommended with respect to her neck. *Id*. at 50.

On cross-examination, Dr. Maletz acknowledged that Claimant's first report of neck symptoms coincided with her school activities and work driving a school bus as reflected in

treatment notes of Dr. Hallberg dated December 27, 1994. *Id*. at 54-56. Dr. Hallberg's treatment notes further reflected that her condition improved after being off for three weeks, and that he prescribed Motrin and recommended cervical traction. *Id*. at 56. The history that Dr. Hallberg had regarding Claimant's condition on July 10, 1995 was not made known to Dr. Maletz at the time of her first examination by him. *Id*. at 57. A June 18, 1997 MRI and nerve conduction study report prepared by Dr. Moalli reflected results consistent with bilateral carpal tunnel syndrome and no evidence of nerve root compression in the cervical area. *Id*. at 57-59. An MRI study of the cervical spine performed February 7, 1999 by Dr. Gaccione revealed some degenerative disk disease from levels C2 through C6 with no stenosis, herniation, or other significant findings. *Id*. at 59-62. Dr. Gaccione set restrictions for Claimant's return to work on July 14, 1997. *Id*. at 62. In a letter to Claimant's counsel dated March 25, 1998, Dr. Gaccione opined that Claimant had acute exacerbation of chronic neck pain with nonspecific radicular symptoms and noted that she had extensive neurological work-ups in the past which failed to demonstrate the existence of any herniated disks or peripheral neuropathy in the cervical area. *Id*. at 62-63. Dr. Maletz was not aware that Claimant had been examined by Dr. Andrew Green, a Board certified orthopedic surgeon who specializes in the shoulder, on November 24, 1998. *Id*. at 63-64. Dr. Maletz acknowledged that a report of Dr. Green's examination noted that he was unable to ascribe a specific anatomic diagnosis to Claimant's symptom complex, and that he could not substantiate any causal connection between her neck and upper should pain and her work at Electric Boat. *Id*. at 64-65. An EMG test of the upper extremities performed by Dr. Bellafiore on August 4, 2000 was also negative despite the fact that Claimant then had ongoing problems with her extremities. *Id*. at 67. A February 15, 2000 report of examination by Dr. White similarly reflected no specific etiology or connection between Claimant's upper extremity complaints and her employment at Electric Boat. *Id*. at 68. Dr. Maletz acknowledged that repetitive activity of opening and closing the door of a school bus with the right upper extremity and the typing activities that Claimant performed "would be totally consistent with one another as causative." *Id*. at 69. Claimant's symptoms in the neck and upper shoulder complex predated her school bus driving activities, and those activities would exacerbate her condition. *Id*. at 72.

Thomas C. Cherry, Jr. M.D.

The deposition of Dr. Cherry was taken on March 12, 2003. CX-22. Dr. Cherry has been in private practice in New London County, Connecticut since 1983 and is Board certified in plastic surgery and hand surgery. *Id*. at 5-6.

Dr. Cherry first examined Claimant on November 6, 1995. *Id*. at 6, CX-10. At that time she had been experiencing problems over a two and a half year period in the right upper extremity and her neck. *Id*. at 7. Dr. Cherry felt the pain at the base of her neck and problems with her right arm were occurring along the course of the ulnar nerve from the elbow distally down to the hand on the ulnar (small finger) side of the hand and arm. *Ibid*. Dr. Cherry examined her upper extremities, particularly the right side, and found she had an acute degree of hypersensitivity at the elbow over the course of the ulnar nerve to the wrist and into the hand which he felt were consistent with a mild to moderate carpal tunnel syndrome. *Id*. at 8. He opined that she had severe ulnar neuritis of the elbow, as well as possible problems further up at the cervical spine level. *Id*. at 8. Dr. Cherry developed a working diagnosis of a "double-ring" or "double-crush" syndrome, in which the same nerve or plexus of nerves is being compressed,

squeezed, or irritated, or has been damaged at more than one level. *Id*. at 8. Dr. Cherry explained that the pain resulting from double crunch syndrome is exponential, i.e., the level of pain and disability resulting from it are greater than the sum of the parts. *Id*. at 9. According to Dr. Cherry, repetitive activity is frequently associated with double crunch injuries but the condition can be caused by a number various injuries. *Ibid*.

Dr. Cherry referred Claimant to Dr. Daniel Moalli, a neurologist, for nerve conduction studies to evaluate the function of the nerve roots in question "for both possible neck or thoracic outlet or more proximal level problems as well as the specific ulnar nerve at the hand and/or elbow level." *Id*. at 10. Dr. Moalli's report of the studies demonstrated that she had carpal tunnel syndrome in both hands as well as ulnar neuropathy at the elbow. *Ibid*. The findings were unequivocally positive indicating a quite severe problem with the ulnar nerve. *Id*. at 11. Dr. Cherry recommended Claimant undergo surgery involving the decompression of the ulnar nerve at the wrist and elbow. *Id*. at 11. He noted that the ulnar nerve, which is the most frequently afflicted with double crunch syndrome, originates in the neck and the nerve roots primarily at the C5, C6, and C7 level exit the neck through the area at the base of the neck and armpit, collectively referred to as the thoracic outlet, down the inside of the arm through the elbow and onto the hand on the small finger side. *Id*. at 13-14.

Surgeries were eventually performed on September 24, 1996 involving a transposition of the ulnar nerve at the right elbow, a release of the right carpal tunnel, and a release of the ulnar nerve at the wrist. *Id*. at 14. The pain experienced by Claimant in her neck and shoulder areas had not changed as a result of the surgery when Dr. Cherry saw Claimant on October 3, 1996. *Id*. at 15.

By October 24, 1996, Claimant had recovered normal range of motion in the elbow and wrist and Dr. Cherry anticipated that she might be able to return to work around December 1, 1996. *Id*. at 16.

By November 21, 1996 when he saw her again, Claimant was complaining that she felt she was actually worse than before the surgery and he saw little alternative other than having her continue with physical therapy and trying to desensitize the areas where the surgeries had been performed. *Id*. at 17.

In early January 1997, Dr. Cherry noted that Claimant had diminished hypersensitivity at the operative site but experienced a persistent decrease in exercise tolerance. *Id*. at 18. He discontinued physical therapy, had her continue home exercises that she had previously been doing, and determined that she would not be able to return to work for at least another month. *Id*. at 19. By January 30, 1997, Dr. Cherry noted slow but steady improvement and that "she had gone to work as a school bus driver with what she described as hundreds of applications or motions of opening or pushing on an air brake and opening and closing the door; and that involved pressure in the palm, that she was not tolerating at all well." *Id*. at 19-20. Dr. Cherry "felt that that was not a job that she should be doing." *Id*. at 20.

Dr. Cherry saw Claimant again on March 6, 1997 and noted continued improvement at both the elbow and hand. *Ibid*. With respect to the upper shoulder and neck area, Claimant told

him that she had an MRI performed since her last visit in January which demonstrated significant muscle spasms to the extent the normal curve of the cervical spine was altered but no disc herniations or neurologic impairments. *Id*. at 21. Dr. Cherry noted some sensory disturbances in the distribution of the radial nerve over the forearm and top of the hand but no pain or discomfort at the lateral epicondyle or the tennis elbow. *Ibid.*

Dr. Cherry again saw Claimant in April 1997 at which time she complained of both arms going numb, symptoms on the left side of the ulnar nerve, and continued problems at the neck level. *Id*. at 22.

On May 29, 1997, Claimant returned with ongoing symptoms in both hands and aching in the right arm. *Ibid*. She also complained of problems in the upper shoulder and cervical spine area. *Id*. at 23. Dr. Cherry referred her for EMG's to determine what changes there were in the nerves that had been operated on. *Ibid*. Findings showed positive carpal tunnel syndrome bilaterally and resolution of the findings at the ulnar nerve at the elbow. *Ibid*.

Dr. Cherry did not treat Claimant at all for her neck problems since he had no training or expertise in that area. *Id*. at 24. Claimant was treated by Dr. Gaccione and Dr. Maletz for her neck condition. *Ibid*.

Dr. Cherry next saw Claimant in October 1997 at which time she had a tender area over the wrist at the ulnar nerve with some irritability further proximal in the arm from where her previous surgery had ended. *Id*. at 25. He attributed Claimant's symptoms to residuals of the surgery rather than ongoing nerve compression. *Id*. at 26.

In November 1997 Dr. Cherry noted that Claimant's condition was worse. *Id*. at 26. According to Claimant, there was a correlation between the worsening of her arm condition and her neck symptoms. *Ibid*. Her carpal tunnel condition was more problematic, and she was still experiencing diffuse soreness in the distribution of the radial and ulnar nerves. *Ibid*. Dr. Cherry opined that Claimant had a persistent problem at the carpal tunnel level with a decompressed median nerve imbedded or encased in scar tissue from the surgery, and that she also had worsened symptoms at the neck giving rise to a double-ring syndrome which caused enhanced pain at the carpal tunnel level. *Id*. at 27.

Dr. Cherry performed another surgery on January 27, 1998 to re-explore Claimant's carpal tunnel area. *Id*. at 28. When he saw Claimant again on February 26, 1998, she had discomfort and pain radiating from the neck down into her arm. *Ibid*. Her report of the pain traveling down from the neck to the arm was significant in that it indicated to him there was another level of problem indicative of the double-ring syndrome. *Id*. at 29.

According to notes of a March 19, 1998 office visit, Dr. Cherry was concerned about the re-occurrence of symptoms in the hands which suggested development of scar tissue that had built up around the nerve. *Id*. at 29-30. It was Dr. Cherry's opinion that Claimant had reached maximum medical improvement with respect to the ulnar nerve surgery at the elbow and the carpal tunnel condition at the wrist but not her other conditions at the thoracic outlet, cervical spine, or shoulder level. *Id*. at 31-32. Dr. Cherry believed the latter conditions were more

disabling and significant than her wrist and elbow problems. *Id*. at 32. Based solely on the wrist and elbow conditions, he believed she could perform light work lifting up to 10 or 15 pounds, but should not climb ladders, engage in repetitive activities, particularly working overhead, or use vibrating tools. *Id*. at 33. She could type and file intermittently if such activities were not the sole or primary part of the job. *Ibid*. The restrictions recommended by Dr. Cherry only applied to the elbow and hand conditions and did not include any other limitations imposed by her other problems in the neck and shoulder. *Id*. at 34.

Dr. Cherry saw Claimant again in August 1998 at which time she was complaining of pain in the olecranon area of the elbow and soreness at the lateral epicondyle which he thought might be bursitis. *Id*. at 34-35.

In September 1998, Dr. Cherry re-injected the tennis elbow. *Id*. at 35. His notes of that visit also reflect a suprascapular compression syndrome which is very rare and involves the pinching of a nerve which comes out through the notch of the scapular at the top of the shoulder and "can give very vague symptoms on down the arm; and it can be mimicked or confused with the radial tunnel syndrome." *Id*. at 36. Dr. Cherry considered doing an epicondylar release but was reluctant to perform further surgery because of the problems she was having with the subscapular nerve and the lack of available medical literature concerning this problem. *Id*. at 37-38.

Claimant underwent further surgery in June 1999 involving transposition of the ulnar nerve at the elbow. *Id*. at 39. A follow-up visit in July 1999 reflected that the nerve sites were doing quite well but the lateral epicondylitis at the elbow had gotten worse to a point where the soreness in moving the arm was interfering with her recovery from the June 1999 surgery. *Ibid*.

Although he had received authorization to perform surgery to treat the lateral epicondylitis in September 1999, Dr. Cherry deferred surgery because of Claimant's increased problems involving her neck. *Id*. at 41.

Dr. Cherry saw Claimant on May 23, 2002 and noted that she was having increasing discomfort in the left elbow and wrist. *Id*. at 42. He thought she was "doing quite well with regard to the right elbow, that she had been developing some of the same type of problems at the left elbow . . . but that also she had ongoing problems with the neck and cervical spine at levels C-4, 5 and 6." *Ibid*. Claimant's problems were "less specific [and] not as well localized on the left as they had been on the right . . . ." *Ibid*. He believed the reason Claimant's left sided problems were less localized was because "there was a more proximal level contribution there, meaning up in the cervical spine and/or thoracic outlet level." *Id*. at 43. He therefore did not believe surgery was warranted. *Ibid*.

When he last saw Claimant again in January 2003, she was having problems with her left hand and right elbow. *Ibid*. Dr. Cherry wanted to do further nerve conduction studies to determine if there was evidence of blockage at the site of the first surgery which "would be another indication that there were likely problems up at the neck level, C-4, 5 and 6, which contributes to that ulnar nerve." *Ibid*. The studies, which Dr. Cherry believed were appropriate

and reasonable, were apparently not done because Electric Boat declined to authorize them. *Id*. at 44.

Dr. Cherry testified that he would continue the same restrictions imposed in 1998 solely with respect to the elbow and hand conditions and felt Claimant could do light or sedentary work which did not involve repetitive activities. *Id*. at 45. He did not feel competent to opine on any restrictions related to her other problems because those conditions were outside his area of treatment and would defer to Dr. Maletz in that regard. *Ibid*. Dr. Cherry further believed that steroid injections would be helpful both diagnostically and therapeutically but again stressed that any treatment with respect to the neck and shoulder conditions was outside his area of expertise. *Id*. at 46.

A. Louis Mariorenzi, M.D.

The deposition of Dr. A. Louis Mariorenzi was taken on April 14, 2003. EX-15. Dr. Mariorenzi, is Board certified in orthopedic surgery and has been in practice since approximately 1960. *Id*. at 3. He examined Claimant at the request of Electric Boat on November 26, 2002 at his office. *Id*. at 4. Claimant described to him her occupation while employed by Electric Boat as "secretary" and stated that her duties included typing seven hours a day, answering the phone, filing, and delivering memoranda for boat inspections. *Ibid*. Although not reflected in his notes, Claimant informed him that she no longer worked at Electric Boat. *Ibid*. He did not know when she left that employment, and did not know when he saw her that she had worked subsequent to leaving Electric Boat. *Id*. at 5. It would be important for him to know if she had not worked since 1996 or 1997. *Ibid*.

At the time of his November 26, 2002 examination, Claimant described to Dr. Mariorenzi complaints involving her hands, arms, elbows, neck and right shoulder. *Ibid*. He also reviewed Claimant's medical records as part of his examination including reports from: Shoreline Orthopedic & Sports Medicine Associates; Peter J. Bellafiore, M.D.; Thomas River Orthopedic Group; Martin J. White, M.D.; Thomas Cherry, Jr., M.D.; Lawrence & Memorial Hospital; Andrew Green, M.D.; Active Orthopedic Associates, Inc.; a neurological report from Dr. Moalli; and reports from Westerly Hospital and Physical Therapy & Sports Rehabilitation in Groton, Connecticut. *Id*. at 5-6. In addition, he reviewed the report of an MRI performed on August 3, 2001, which he interpreted as showing mild degenerative changes at C5-C6 with some right central protrusion but without evidence of cord compression or foraminal entrapment, and the report of an MRI of the cervical spine from 1997 which showed degenerative changes from C2 through C6 without disc herniation or spinal stenosis and a normal cervical cord throughout. *Id*. at 7-8.

With respect to his physical examination of Claimant, Dr. Mariorenzi noted that she was alert, cooperative, and in no acute distress. *Id*. at 8. He further testified:

> Examination of her neck revealed normal cervical lordotic curvature. She complained of tenderness to palpation to superficial touch throughout along the paracervical muscles interscapular region with no localized areas of point tenderness. Motion to the neck was full and complete. There was no spasm of

> the paracervical muscles. Compression test was negative. Interscapular tenderness was absent. Examination of the right upper extremity revealed the patient to complain of some discomfort with shoulder motion. No true restricted motion was detected. She had no evidence of deltoid atrophy. She had no evidence of impingement. No instability to the shoulder was noted to be present. There was no atrophy in the upper arm. Examination of the right elbow revealed a surgical scar along the medial aspect measuring four inches in length. This [scar was] well-healed, cosmetically acceptable and it had reached an end stage. Over the volar aspect of the wrist she had a half-inch incision which was also well-healed, cosmetically acceptable and it also had reached an end stage. Examination of the right elbow revealed full flexion, full extension, normal supination and normal pronation. There was [sic] some complaints of superficial tenderness along the scar medial aspect of the elbow. The Tinel's in the region of the elbow was noted to be . . . present. There was no Tinel's over the anterior aspect of the elbow where the surgical scar was noted. There was no instability to the elbow joint. At the present time no specific tenderness along the lateral aspect of the elbow was elicited. Examination of the forearm revealed no atrophy. Examination of the wrist revealed dorsiflexion, volar flexion, radial and ulnar deviation to be normal. The patient had a negative Phalen's and a negative Tinel's at the wrist. The sensory examination with reference to the arm and forearm was patch, irregular and followed no specific peripheral or neurodermatomal distribution. Her grip and pinch using gripometer and inchometer were noted to be normal.

Id. at 8-10. He testified that the absence of a Tinel's sign is diagnostic of carpal tunnel syndrome at the wrist and cubital tunnel syndrome at the elbow, and that his tests of Claimant with respect to her wrist and elbow were negative. *Id*. at 11. Based on his examination, it was Dr. Mariorenzi's opinion that Claimant had made a full recovery from her wrist and elbow problems by the time of his examination. *Id*. at 12. That opinion was based on his normal physical findings, normal EMG studies reflecting no residuals of ulnar or median neuritis or nerve root entrapment. *Ibid*. It was also Dr. Mariorenzi's opinion to a reasonable degree of medical certainty that Claimant suffered an ulnar nerve entrapment with associated ulnar neuritis as a result of her employment which was surgically treated and from which she made a full recovery. *Id*. at 13. He also believed she probably suffered a median nerve entrapment of the right elbow with median neuritis and had fully recovered after surgery from that condition. *Ibid*. He did not believe there were any further diagnostic tests or treatment that were recommended, that Claimant's prognosis was good, that she had reached maximum medical improvement, that she had no functional impairment, and that she was capable of returning to work without any restrictions or limitations. *Id*. at 13-14.

According to Dr. Mariorenzi, thoracic outlet syndrome is an entrapment of the subclavian artery and the brachial plexus as it leaves the neck and goes down into the arm. *Id*. at 14. He believed that a bona fide study such as an EMG of ulnar nerve involvement was needed to properly diagnose the condition and stated that the most common cause of the condition was an extra cervical rib. *Id*. at 14-15. He did not believe that the condition could result from "trauma of that type" and testified that the EMG study done by Dr. Bellafiore in 2000 confirmed

Claimant did not have thoracic outlet syndrome. *Id*. at 15. He further testified that Adson's maneuver is not alone diagnostic for thoracic outlet syndrome. *Id*. at 15-16. He described double crush syndrome as "usually it's referred to in the upper extremities. When someone has a problem where they had EMG changes suggestive of carpal tunnel and also at the same time have had some EMG changes suggestive of nerve root involvement particularly the same nerve roots that would normally supply the area that the median nerve supplies in the carpal tunnel . . . ." *Id*. at 16. Since neither the 1997 nor the 2000 MRI showed nerve root compression, it was Dr. Mariorenzi's opinion that Claimant did not have double crush syndrome. *Id*. at 16-17. He described "microtrauma" as resulting from repetitive activity, and he believed a 2001 MRI study revealed degenerative arthritis in the neck, primarily at C5-C6, and some disc protrusion without compression of the cord or evidence of foraminal entrapment of the nerves, which was not the result of microtrauma. *Id*. at 17-18. He believed that degenerative arthritis in the neck normally occurred in the general population as part of the aging process and that dentists were the only individuals who might experience a higher incidence of the condition since "they got their head twisted down, up and under . . . ." *Id*. at 19. He did not believe Claimant's degenerative arthritis of the neck was related to her work at Electric Boat. *Ibid*. He further believed that there were no physical findings or diagnostic studies to substantiate any ongoing problems with respect to Claimant's hands and arms. *Id*. at 20.

On cross-examination, Dr. Mariorenzi acknowledged that he treats patients for work-related injuries and that it is important to take a good history from them at the time of treatment. *Id*. at 23-24. He further agreed that it was important to listen to patients' complaints to determine whether they change and are consistent with verifiable objective and other diagnostic studies. *Id*. at 25. Dr. Mariorenzi did not review Claimant's medical records before examining her on November 26, 2002 because he wanted "to go in there with a clear and undetermined mind." *Id*. at 28. He did not specifically recall when after the examination he reviewed Claimant's medical records, and he did not take any notes with respect to that review. *Id*. at 29. It was his opinion that her response to palpation along the paracervical muscle in the interscapular region was inappropriate. *Id*. at 31. As far as signs he would expect to see in the presence of thoracic outlet syndrome, Dr. Mariorenzi testified that there would be vascular abnormalities, coldness in the extremities, blanching in the extremities if there were sufficient pressure on the subclavian artery, and significant involvement of the brachial plexus, but particularly changes verified by EMG findings involving the ulnar nerve. *Id*. at 37-38. He also stated that it was not his regular practice to list all medical reports that he has reviewed. *Id*. at 39. He was aware that Dr. Cherry imposed some restrictions on Claimant's ability to work which were not recorded in Dr. Mariorenzi's report because he did not agree with them. *Id*. at 40. He was not aware of any requests for further treatment of Claimant made by other physicians. *Id*. at 41. Dr. Mariorenzi testified that he did not examine Claimant for thoracic outlet syndrome because he did not think she had thoracic outlet syndrome. *Id*. at 42. He further reiterated that, in his opinion, Claimant had reached maximum medical improvement and was fully recovered from median and ulnar entrapment of the right elbow with associated ulnar neuritis at the time of his examination. *Id*. at 43-45. His opinion was based entirely on his examination and the EMG studies reviewed, the most recent of which was September 29, 2000. *Id*. at 46-47. With regard to his opinion that Claimant's peripheral neuropathies to the right upper extremity were occupationally related, Dr. Mariorenzi was referring to ulnar and median nerve entrapments and neuritis at the right wrist and elbow. *Id*. at 47-48. "Peripheral" refers to

any nerve outside the central nervous system and includes the ulnar and median nerves. *Id*. at 48. "Neuropathy" refers to the inflammation of a particular peripheral nerve at a particular site. *Ibid*. When a peripheral nerve is entrapped, symptoms relating to that entrapment always run from that point down into the extremity, *i.e.*, distally. *Id*. at 48-49. "You might get some referred symptoms proximally but you won't get sensory changes proximally. You might have complaints of pain proximally but all the changes have to be from where the nerve is pinched distal[ly]." *Id*. at 49.

VOCATIONAL EVIDENCE

Donna White

Donna White, a vocational rehabilitation case manager with Concentra Integrated Services, was deposed on April 9, 2003 and provided an opinion for Electric Boat on the vocational aptitude of Anne Marie Ferraro. EX-16. She has a Masters degree in rehabilitation counseling from Assumption College in Worchester, Massachusetts, a Bachelor of Science degree in speech pathology and audiology from North Eastern University in Boston, is certified both as a Disability Management Specialist and a Rehabilitation Counselor, and is licensed in the Commonwealth of Massachusetts. *Id*. at 3-4, 22. She has been employed by Concentra for nearly 21 years. *Id*. at 4.

On February 27, 2003 and March 3, 2003, she updated a market survey previously prepared for Claimant on November 9, 2001. *Ibid*. In preparation for the updates, she reviewed a November 26, 2002 IME by Dr. Louis Mariorenzi and the prior labor market survey. *Id*. at 5. The prior survey reflected that Claimant had an Associates Degree in business management, and included various medical records including an operative report from Dr. Thomas Cherry, examination reports from Drs. Andrew Greene and Frank Maletz, two IME reports from Dr. Martin White, and others. *Id*. at 6. After reviewing the recent report of Dr. Mariorenzi, she reviewed the prior labor market survey to see if the jobs that were listed at that time would still apply based on what Dr. Mariorenzi found. *Id*. at 6-7. Based on that information, considering Claimant's educational and vocational background and her physical restrictions and limitations, she saw nothing that would preclude Claimant from working a 40-hour workweek. *Id*. at 7. According to White, the current national average weekly wage is $498.27, and it was $360.57 in 1993. *Id*. at 8. White identified eleven positions that she considered suitable for Claimant including front desk or reservations clerk at local hotels and office clerk or receptionist at area businesses. *Id*. at 8-20. Many of the positions involved placement through employment agencies, and White contacted all potential employers but one via telephone. *Ibid*, *see also id*. at 29, 38. One employer informed her that no jobs were then available, another informed her that the position about which she was inquiring was only part-time, and three positions identified in the survey required that an applicant apply for a specific job over the Internet. *Ibid*. White made no attempt to contact Claimant before updating her labor market survey, nor was she interviewed when prior labor market surveys were prepared. *Id*. at 21.

On cross-examination, White testified that she believed it was very important to obtain notes and reports of a treating physician when conducting IME's to get a "well-rounded view" of the claimant since physicians performing IME's see the individual on only one occasion. *Id*. at

24-25. She further believed it was very important for a vocational specialist to fully understand the individual's physical condition. *Id*. at 25. White did not have copies of medical reports although she had a copy of Dr. Mariorenzi's IME report and the prior labor market survey from November 2001. *Id*. at 26. White believed that either Dr. Greene or Dr. Maletz were Claimant's treating physician but was not sure. *Id*. at 27.

With respect to Claimant's injuries, she understood that she had "bilateral thoracic outlet symptom[s] and carpal tunnel issues." *Ibid*. Her understanding of thoracic outlet syndrome was that "there is a constrictor in the thoracic outlet, and it causes some difficulty down one's arms." *Id*. at 28. White's March 3, 2003 report reflects conditions involving the right arm, shoulder, and neck, but does not mention bilateral thoracic outlet syndrome. *Ibid*. She did not know what opinion Claimant's treating physician held with respect to her disability. *Id*. at 57. Based on the report of Dr. Mariorenzi and the number of years Claimant had not been performing repetitive tasks, White assumed when she prepared her updated labor market survey that Claimant's condition had either stayed the same or improved slightly. *Id*. at 62-63.

When preparing her updated labor market survey, White relied only on Dr. Mariorenzi's medical opinion that Claimant was capable of returning to her usual type of work with no restrictions or limitations in determining what jobs would be available. *Id*. at 30-32. She relied on the Dictionary of Occupational Titles to determine the physical demands of particular jobs. *Id*. at 33. The job of administrative clerk requires repetitive use of the hands. *Ibid*. White telephoned individual employers to find out what the specific requirements were for the jobs she identified. *Id*. at 35. She informed each of the prospective employers that Claimant had no restrictions based on Dr. Mariorenzi's report, but "took into account, you know, that she may have some difficulty doing repetitive tasks based on [Claimant's] own assessment." *Ibid*. When she called potential employers, White sometimes posed as a prospective job applicant, sometimes said she was working with a person as a vocational counselor, and sometimes said she was making a list of potential employers to compare with a list of potential employers made by a client. *Id*. at 51-52. She had no knowledge of the hiring criteria of potential employers other than what she was told by them when she called. *Id*. at 55. She did not research any job positions such as administrative clerk, bank clerk, or school bus driver that would involve Claimant's vocational experience prior to the onset of her medical conditions. *Id*. at 63-64. When she prepared the November 2001 labor market survey, she reviewed and considered many medical reports including those of Dr. Cherry, Dr. Maletz, Dr. Gaccione, and Dr. Greene. *Id*. at 65.

Carl Barchi

Carl Barchi has been a vocational counselor for approximately 30 years, and he assessed over 1300 claimants between 1987 and 1997. CX 24 at 4. He first met Claimant approximately five years earlier when he was assigned by the Department of Labor to prepare a vocational rehabilitation plan for her. *Id*. at 6-7. Prior to completing an initial assessment report in October 1997, he obtained her work history and contacted her treating physicians. *Id*. at 7-8. In March 1998, Barchi placed Claimant's file in "interrupted status" until June of 1998 because of her hand surgery in January 1998. *Id*. at 11. Despite Claimant's interest in keeping her file open, he closed the file on March 10, 1998 because Claimant was medically unstable. *Ibid*.

Barchi met with Claimant again in March 2003 at the request of her attorney. *Id*. at 12. He observed Claimant's house to be "messy" with books and paper in piles "all over the floor." *Id*. at 13. Claimant informed Barchi that she was physically unable to handle housekeeping chores. *Id*. at 14.

Before preparing a vocational rehabilitation report, Barchi reviewed recent medical reports from treating doctors and an independent medical report, and he asked Claimant to report on her own perceptions of her limitations. *Id*. at 15. She stated that she was in a lot of pain and that she was unable to lift more than a few pounds because of poor grip strength. *Id*. at 15, 23 She rated her pain a level seven on a scale of one to ten. *Ibid*. The pain in her dominant right hand is worse than in the left because she used her right hand more in activities of daily living and at work. *Id*. at 23. She reported that she walked several miles per day, was able to tend to her personal hygiene, but said that she did everything "at a much slowed-down pace." *Ibid*.

Barchi noted in his April 1, 2003 report, attached to the transcript of his deposition as Exhibit 1, that Claimant sustained cumulative trauma injuries to her hand, right arm, right shoulder, and neck, which information he obtained from her original injury report. *Id*. at 15-16. He noted that the report of Donna White, dated March 3, 2003, contained similar observations with respect to Claimant's diagnosis. *Id*. at 16. Barchi was aware through Dr. Maletz that Claimant had undergone five surgeries to the right upper extremity beginning in 1996 and that she had received steroid injections which were unsuccessful in reducing her neck pain. *Id*. at 17. She was not on prescribed medication but took Motrin for pain. *Ibid*. It was Barchi's opinion that Claimant was able to withstand more pain than the average person. *Id*. at 18. According to Dr. Maletz's December 2, 2002 report, Claimant was then "totally temporarily disabled." *Ibid*. Barchi would consider other medical reports but would "give [the treating physician's report] 100 percent because I could not, as a vocational person, I would not be going against what the treater, especially who has been treating her a number of years, what he or she would say in terms of what the capabilities are." *Id*. at 19. Barchi also reviewed a December 10, 2002 medical report from Dr. Mariorenzi which stated that Claimant had made a "full and complete recovery" and could return to her former employment "with no restrictions and no limitations." *Id*. at 21. As a vocational counselor, he would ignore Dr. Mariorenzi's report and deal with Claimant solely on the basis of the treating physician's report because Dr. Mariorenzi's report was "so diametrically opposed, and it shocked me to see that at that particular time." *Id*. at 22.

Barchi reviewed both labor market surveys prepared by Donna White. *Id*. at 24. He disagreed with the conclusions reached by White in her March 3, 2003 survey. *Ibid*. Barchi noted that White's report failed to take into account any medical information from Dr. Maletz. *Id*. at 25. The report also failed to reflect the effects on employability of Claimant's reported limitations including that her right hand falls asleep, that it feels cold and achy, that both hands were weak, and that she has pain in the region of her right wrist. *Id*. at 25-26. Nor did the report consider that Claimant did not possess any readily marketable transferable skills in light of the fact that she had been out of work for the prior seven or eight years. *Id*. at 26-27. Barchi's report further notes that "[t]he USDOL's Selected Characteristics of Occupations in the DOT require repetitive and frequent reaching, handling and fingering – all of which Mrs. Ferraro's conditions preclude." *Id*. at 28-29. According to Barchi:

> The jobs that she did before at Electric Boat and the jobs that are being proposed as jobs she can physically do in this labor market survey would be jobs that would be precluded, because all of these jobs, according to the Dictionary of Occupational Titles, are listed . . . receptionist, front desk clerk, general office clerk, they all involve either repetitive and frequent or constant reaching, handling and fingering.

Id. at 29-30.

Based on his review of the medical reports, the labor market survey done by White dated March 3, 2003, and his meeting with Claimant, Barchi concluded that she had no vocational potential or reasonable expectation of being able to work competitively in the near future. *Id*. at 30. Barchi also believed that White's failure to go to any of the places of employment identified in her labor market survey was important, and that doing an on-site job analysis was better in situations where you were actually trying to determine whether a particular job met the functional limitations of an individual. *Id*. at 31-32. According to Barchi, "without getting out there and talking to people and personnel or, if you could, to actually talk to department supervisors, you don't have the specific information in terms of what the job demands are going to be." *Id*. at 33. The problems are compounded when you are dealing with an employment agency instead of a prospective employer. *Id*. at 34. Unlike White, Barchi presented himself as a vocational case manager when contacting prospective employers. *Id*. at 35. He would never identify himself on the phone as the person who was actually looking for a job. *Id*. at 36.

On cross-examination, Barchi stated that he met with the Claimant for approximately two hours at the request of her attorney before preparing his April 1, 2003 labor market survey. *Id*. at 38-39. He acknowledged that the diagnosis reflected in White's labor market survey dated November 9, 2001 of bilateral carpal tunnel, ulnar nerve, right arm, neck and shoulder, was the same diagnosis reflected in her updated labor market survey. *Id*. at 39. He further acknowledged that the diagnosis reflected in that report was based on medical information including reports from Dr. Maletz, and that Dr. Mariorenzi's report was not considered in the original November 9, 2001 labor market survey. *Id*. at 40.

Barchi reviewed everything in Claimant's file before preparing his updated labor market survey, although his report notes only that he reviewed the reports of Dr. Maletz and Dr. Mariorenzi. *Id*. at 41. It is a common practice to use independent medical examinations in workers' compensation cases. *Id*. at 42. Barchi did not review the IME reports of Dr. White in 2000 and 2001. *Id*. at 43. If he had seen Dr. White's IME reports along with Dr. Mariorenzi's 2002 IME report, he would "feel more comfortable giving more weight to the impartial [examiners' opinions if they had said Claimant had some residual work capacity]." *Id*. at 44. Dr. White's February 15, 2000 report notes that Claimant was employable in a sedentary position involving clerical work where she was limited to two hours of keying or typing per day. *Id*. at 44. Dr. White's April 25, 2001 IME report similarly notes that Claimant could perform sedentary jobs involving light clerical duties with certain restrictions. *Id*. at 45.

Barchi did not believe that Claimant would be able to perform work greeting guests at a hotel and showing them to their rooms in light of her reported pain level of seven most of the time. *Id*. at 49. He relied on Claimant's statements regarding her pain level, as well as references in Dr. Maletz's report to pain symptoms, in forming that opinion. *Id*. at 49-50. The type of pain described by Dr. Maletz in his December 27, 2002 report – burning over the lateral side of the right elbow, persistent pain in the carpal tunnel regions of the median nerve of both wrists, and persistent symptoms in the cervical and lumbar spines – would have a negative impact on anyone working as a "greeter" at a hotel. *Id*. at 51. Dr. Mariorenzi's IME report noting no limitations and no restrictions conflicts with Dr. White's IME reports from 2000 and 2001 noting specific restrictions and permanent partial disabilities, as well as Dr. Maletz's records of treatment. *Id*. at 52. When Claimant's pain symptoms are superimposed over the restrictions imposed by Dr. White in his 2000 and 2001 reports, the jobs identified by White in her labor market survey are not realistically available. *Id*. at 53. White never presented those limitations to prospective employers identified in her labor market survey. *Ibid*. Dr. Mariorenzi's report neglects two and a half years of treatment, symptoms, and medical history in light of the fact that the most recent medical evidence he reviewed prior to preparing his IME reports was September 29, 2000. *Id*. at 54. Barchi would be reluctant to rely on such a report in trying to place a client in a job. *Id*. at 55.

DISCUSSION

A. Injuries Arising Out of and In the Course of Employment.

Claimant asserts that she sustained injuries to her shoulder, neck and thoracic outlet during the course of her employment with Electric Boat, in addition to the injuries to her right hand, wrist, and elbow that Employer has acknowledge are work-related. Claimant's Proposed Findings of Fact and Conclusions of Law ("Cl. Br.") at 30. She also argues that she has been totally disabled since September 24, 1996 as a result of all her work-related injuries. *Ibid*. Claimant asserts also that Employer previously agreed to accept her neck and shoulder condition as work-related, it paid for prior treatment for the neck, and it is therefore estopped from now denying her claim for medical treatment for the neck and shoulder.[2] *Ibid*.

Employer argues that Claimant's complaints regarding her neck, upper arm, and shoulder, are a result of her degenerative disc disease and not related to the repetitive stress

[2] In light of my finding below with respect to Claimant's neck and right shoulder injury, it is not necessary to address Claimant's equitable estoppel argument in this case. Were it necessary to rule on this issue, however, I am not persuaded that Claimant could meet the four-part test described by the court in *Rambo v. Director, OWCP*, 81 F.3d 840, 30 BRBS 27 (CRT) (9th Cir. 19960, *rev'd on other grounds, Rambo II*, 521 I/S/ 121. 31 BRBS 54 (CRT) (1997). *See* Emp. Br. At 19. The payments made by Employer with respect to Claimant's neck and shoulder injury were not made pursuant to any decision awarding benefits and were strictly voluntary. Employer ceased making such payments after reviewing medical evidence which it believed showed those conditions were unrelated to Claimant's employment. The medical evidence upon which it relied was generated after Claimant agreed to remand her claim instead of proceeding with the hearing scheduled in January 1997. There is no evidence that Employer's request for remand was anything other than a genuine attempt to obtain clarification regarding Ferraro's medical condition so that it could make an informed decision with respect to further compensation and treatment. There is also no evidence that Employer has taken inconsistent positions with respect to this claim, or that Claimant has been disadvantaged as a result of Employer's conduct. The doctrine of equitable estoppel thus would not apply given the facts of this case.

injury to her right hand, wrist and elbow which it acknowledges was sustained in the course of Claimant's employment at the Electric Boat shipyard in Groton, Connecticut. Trial Memorandum on Behalf of Employer ("Emp. Br.") at 1. Employer further asserts that Claimant has exaggerated her pain to avoid employment and a reduction in benefits, and that she is capable of performing suitable alternative employment. *Id*. at 1-2.

The LHWCA provides that, absent substantial evidence to the contrary, a claim for benefits comes under the provisions of the Act. 33 U.S.C. § 920(a). The claimant must establish a *prima facie* case by proving that he or she suffered some harm or pain, *Murphy v. SCA/Shayne Brothers*, 7 BRBS 309 (1977), *aff'd mem.*, 600 F.2d 280 (D.C. Cir. 1979), and that an accident occurred or working conditions existed which could have caused the harm. *Kelaita v. Triple A Mach. Shop*, 13 BRBS 326 (1981). *See U.S. Industries/Federal Sheet Metal v. Director, OWCP (Riley)*, 455 U.S. 608, 14 BRBS 631, 633 (1982), *rev'g Riley v. U.S. Industries/Federal Sheet Metal*, 627 F.2d 455, 12 BRBS 237 (D.C. Cir. 1980); *Gooden v. Director, OWCP*, 135 F.3d 1066, 32 BRBS 59 (CRT) (5th Cir. 1998); *Bolden v. G.A..T.X. Terminals Corp.*, 30 BRBS 71 (1996); *Stevens v. Tacoma Boatbuilding Co.*, 23 BRBS 191 (1993). It is the claimant's burden to establish both elements of a *prima facie* case by affirmative proof. *See Kooley v. Marine Industries Northwest*, 22 BRBS 142 (1989); *see also Director, OWCP v. Greenwich Collieries*, 512 U.S. 267, 28 BRBS 43 (CRT) (1994). The claimant is not required to introduce affirmative medical evidence that the working conditions in fact caused the alleged harm; rather, the claimant must show that working conditions existed which could have caused the harm. *See generally U.S. Industries/Federal Sheet Metal, Inc.*, 455 U.S. at 608, 14 BRBS at 631. A claimant's subjective complaints of pain alone may be sufficient to establish the injury element of the *prima facie* case even though there is no objective findings that claimant is harmed. *Harrison v. Todd Pacific Shipyards Corp.*, 21 BRBS 339 (1988).

Claimant's work station at Electric Boat had a telephone located to her left and a computer on her right, and when she simultaneously used the computer and telephone she "crunched" the phone between her ear and shoulder to type and work at the same time. Tr. at 31. According to Dr. Maletz, Claimant's description of her workstation "necessitated that she be in [a laterally flexed position with her neck positioned in such a way that her ear was closer to her shoulder], and she was constantly twisting in that position to . . . be able to visualize the screen . . . which would have created an unbalancing of the way the neck work position ideally would have . . . been handled." CX-23 at 15. Claimant worked at Electric Boat until she was laid off in July of 1994. Tr. at 39. During the period she was employed there, she complained of pain in her right upper extremity and shoulder associated with her work-related activities. For example, on April 2, 1993 Claimant went to the yard hospital with complaints of pain in her "right hand, arm, elbow and shoulder area . . . ." *Id*. at 34. The treatment notes of that date specifically reflect "pain in both hands, esp[ecially] the [right] hand which is painful to elbow and [right] shoulder" associated with "repeated trauma." CX-6. Dr. Hallberg's treatment notes from April 22, 1993 similarly reflect complaints in both wrists, right elbow, and shoulder due to an "overuse tendonitis related to [Claimant's] typing." CX-7.[3] It is thus clear that Claimant had an injury

[3] I also note that, with respect to her shoulder, Claimant testified she believed that term included the area encompassing the nape of her neck up to just below her ear. Tr. at 70. From a lay point of view, that description is entirely believable, and I find Claimant's testimony in this regard to be credible. Furthermore, although she may not have expressly used the term "neck" with respect to her physical complaints until December 27, 1994 when she was

which occurred within the time and space boundaries of her employment involving activities related to her employment. I therefore find that Claimant has established a *prima facie* claim for compensation, and Section 20(a) of the LHWCA is applicable.

Once invoked, Section 20 presumes that a claimant's injury is causally related to his or her employment. *Swinton v. J. Frank Kelly, Inc.*, 554 F.2d 1075 (D.C. Cir), *cert. denied*, 429 U.S. 820 (1976). Only if the employer produces substantial evidence to rebut the presumption, does the presumption then fall out of the case. *Ortco Contractors, Inc. v. Charpentier*, ___ F.3d ___, 37 BRBS (CRT) 35, 39 (5th Cir. 2003); *MacDonald v. Trailer Marine Transport Corp.*, 18 BRBS 259 (1986), *aff'd mem. sub nom. Trailer Marine Transport Corp. v. Benefits Review Board*, 819 F.2d 1148 (11th Cir. 1987); *Novak v. I.T.O. Corp*., 12 BRBS 127, 129 (1979); *Compton v. Pennsylvania Avenue Gulf Service Center*, 9 BRBS 625, 628 (1979). The relevant inquiry at this juncture is whether the employer has succeeded in establishing the lack of a causal nexus. *Dower v. General Dynamics Corp.*, 14 BRBS 321 (1981). An employer need not establish some other agency of causation to rebut the Section 20(a) presumption. *O'Kelley v. Dept. of the Army/NAF*, 34 BRBS 39 (2000). "Substantial evidence" is such relevant evidence as a reasonable mind might accept as adequate to support a conclusion. *American Grain Trimmers, Inc. v. Director, OWCP* [*Janich*], 181 F.3d 810, 33 BRBS 71 (CRT) (7th Cir. 1999) (*en banc*), *cert. denied*, 120 S.Ct. 1239 (2000). A physician's unequivocal testimony regarding the lack of a causal nexus, rendered to a reasonable degree of medical certainty, is sufficient to sever the causal relationship between claimant's employment and his or her harm. *O'Kelley v. Dep't of the Army/NAF,* 34 BRBS 39 (2000).

Dr. Mariorenzi examined Claimant at the request of Electric Boat on November 26, 2002 at his office. EX 15 at 4. He also reviewed Claimant's medical records as part of his examination including the results of various neurological and magnetic resonance imaging tests conducted during the course of Claimant's treatment. *Id*. at 5-8. Based on his examination, it was Dr. Mariorenzi's opinion to a reasonable degree of medical certainty that Claimant suffered an ulnar nerve entrapment with associated ulnar neuritis as a result of her employment at Electric Boat which was surgically treated and from which she made a full recovery. *Id*. at 12-13. He also believed she probably suffered a median nerve entrapment of the right elbow with median neuritis and had fully recovered after surgery from that condition as well. *Ibid*. Dr. Mariorenzi believed that Claimant's prognosis was good, that she had reached maximum medical improvement, that she had no functional impairment, and that she was capable of returning to work without any restrictions or limitations. *Id*. at 13-14. He believed that a bona fide study such as an EMG showing ulnar nerve involvement was needed to properly diagnose thoracic outlet syndrome and stated that the most common cause of the condition was an extra cervical rib. *Id*. at 14-15. He did not believe that the condition could result from "trauma of [the] type [described by Claimant]" and testified that the EMG study done by Dr. Bellafiore in 2000 confirmed Claimant did not have thoracic outlet syndrome. *Id*. at 15. Since neither the 1997 nor the 2000 MRI showed nerve root compression, it was Dr. Mariorenzi's opinion that Claimant did not have thoracic outlet or "double crush" syndrome. *Id*. at 16-17.

---

working for the bank in Westerly, Rhode Island, *id*. at 58, it is clear that Claimant's physical ailments included more than just the right hand, wrist, and elbow, as alleged by Employer.

As noted above, a physician's unequivocal opinion rendered to a reasonable degree of medical certainty that there is no causal nexus between a claimant's work activity and an alleged injury is sufficient to sever the causal relationship between claimant's employment and his or her harm. *O'Kelley v. Dep't of the Army/NAF, supra*. Dr. Mariorenzi's opinion is clear and unequivocal – he does not believe that Claimant's work at Electric Boat caused any condition affecting her right shoulder or neck. Indeed, Dr. Mariorenzi stated that thoracic outlet syndrome could not be caused by the repetitive trauma involved in Claimant's work, and he further testified that she did not have that condition. He physically examined Claimant and reviewed various medical reports, including the results of objective medical tests, before reaching his conclusion, and his opinion is evidence which a reasonable mind might accept as adequate to support a conclusion that Claimant's complaints involving her right shoulder and neck are not work-related. *American Grain Trimmers, Inc. v. Director, OWCP, supra*. I therefore find that Employer has successfully rebutted the Section 20(a) presumption by presenting substantial evidence of no causal nexus. The presumption thus drops out of the case and I must weigh all of the evidence relevant to the causation issue. *MacDonald v. Trailer Marine Transport Corp.*, 18 BRBS 259 (1986), *aff'd mem. sub nom. Trailer Marine Transport Corp. v. Benefits Review Board*, 819 F.2d 1148 (11th Cir. 1987).

Employer asserts that "three independent medical examiners opined that the cervical complaints [of Claimant] were not causally related to [her] employment." Emp. Br. At 20. It further argues that "[t]he opinions of Dr. Greene, Dr. White, and Dr. Mariorenzi are entitled to more weight than [the contrary opinion] offered by Dr. Maletz." *Ibid*. Employer's characterization of the opinions of Drs. Greene and White as supportive of a finding that Claimant's neck and shoulder complaints are not causally related to her employment is, as explained below, inaccurate.

According to the November 24, 1998 report of his evaluation of Claimant, Dr. Green determined that Ferraro was suffering from chronic pain syndrome. EX 1. He noted that an MRI of her cervical spine showed no obvious degenerative changes or significant disc abnormality, and stated he was "unable to ascribe a specific anatomic diagnosis to her symptom complex." *Ibid*. He noted that Claimant's cervical spine motion was limited in all directions and that she experienced neck pain which radiated down her arms when he manipulated her neck. *Ibid*. With respect to "causality," he wrote:

> I have no way to substantiate her claim that her neck and upper shoulder pain is causally related to work activities. This is based upon the history that she has provided and the records that I have reviewed.

Ibid. Dr. Green thus did *not* say that Claimant's symptoms were not a result of her work activities at Electric Boat. He simply said that, based on his review of the medical evidence, he could not affirmatively state there *was* a relationship.

Similarly, Dr. White first assessed Claimant on February 15, 2000. EX 2. He noted, *inter alia*, significantly decreased flexion and extension of the cervical spine, moderate decrease of rotation and bending to both sides, and aggravation of neck discomfort on motion of the cervical spine. *Id*. at 4. He found full range of motion of the right shoulder but a "mildly

positive" impingement sign, and noted that any motion or contraction about the elbow aggravated Claimant's neck discomfort. *Ibid*. Dr. White diagnosed Claimant with chronic pain syndrome. He wrote:

> There is no evidence of any cervical radiculopathy however the patient continues to have neck pain and [right] upper extremity symptoms. There are some focal signs of inflammation over the lateral epicondyle of the [right] elbow consistent with tennis elbow syndrome but no conclusive evidence of radial tunnel syndrome. She has ongoing sensitivity and irritation about the [right] ulnar nerve. There is no conclusive evidence of ongoing [right] carpal tunnel syndrome. I anticipate she will have ongoing discomfort. Her pain is chronic in nature and despite multiple surgical interventions, she has had no long term improvement.

Ibid. He also noted that Claimant's "symptoms have worsened, become more global and are non specific in nature." *Ibid*. With respect to the issue of causation, he wrote:

> The causal relationship to her injury is difficult to assess. It appears from her history that the [right] carpal tunnel and ulnar nerve symptoms are related to her employment at Electric Boat. I can not however determine any causal relationship between her neck shoulder pain and her employment with Electric Boat. Additionally, her recent complaints (past three years) of lateral [right] elbow pain appear to be unrelated to employment with Electric Boat.

Id. at 5.

Dr. White again examined Claimant on April 24, 2001. EX 3. He noted *inter alia* that, since the time of his prior examination of her, Claimant had experienced "progressive discomfort of her neck radiating into the intrascapular region, top of the shoulders and down both arms and into the back of both hands." *Id*. at 1. He noted with respect to Claimant's cervical spine symptoms that there were no focal neurologic deficits and stated "[t]here may be some underlying, undiagnosed neurologic conditions that is [sic] a factor in her ongoing and progressive symptomatology." *Id*. at 2. He again opined that Claimant's right hand symptoms were causally related to her employment at Electric Boat, and, contrary to his earlier reported included her elbow symptoms as work-related. *Ibid*. Dr. White further stated: "It is unclear to me that there is any clear relationship between her employment at that facility and her progressive discomfort in her neck and shoulder." *Ibid*. Just as was the case with Dr. Green, Dr. White did not say that Claimant's symptoms were not a result of her work activities at Electric Boat. Rather, he simply concluded that he could not identify a "clear relationship' between Claimant's symptoms and her work for Employer.

Although Dr. Green's and Dr. White's opinions would not support a finding of a causal relationship between her neck and shoulder symptoms and her work, they do not, as Employer asserts, affirmatively sever any causal connection between those symptoms and the repetitive trauma she experienced while working for Electric Boat. That leaves only the opinion of Dr. Mariorenzi, discussed above, to support Employer's contention that Claimant's neck and right

shoulder condition are unrelated to her employment by Electric Boat. As explained below, I find the opinions of Claimant's treating physicians more persuasive on this issue.

With respect to medical records reflecting treatment by Ferraro, Claimant was originally seen by Dr. Andrew Hallberg in 1993 for complaints of pain in her wrists, right elbow, and shoulder. CX-7. Dr. Hallberg referred Claimant to Dr. Thomas Cherry who examined her initially on November 19, 1995 "for evaluation and treatment of ongoing pain and problems in her right upper extremity and neck." CX 10 at 1. Dr. Cherry noted that Claimant presented with "significant problems in the right upper extremity which . . . are localized along the distribution and course of the ulnar nerve almost exclusively." *Ibid*. His assessment was "sever ulnar neuritis and allodynia . . . particularly with the findings at the neck level." *Ibid*.

During his deposition, Dr. Cherry testified that he employed a "working diagnosis" of "double-ring" or "double-crush" syndrome when he first examined Claimant. CX-22 at 8. He described this condition as one in which the same nerve or plexus of nerves is being compressed, squeezed, or irritated, or has been damaged at more than one level. *Ibid*. Dr. Cherry explained that the pain resulting from double crunch syndrome is exponential, *i.e.*, the level of pain and disability resulting from it are greater than the sum of the parts. *Id*. at 9. He noted that repetitive activity is frequently associated with double crunch injuries but the condition can be caused by a number various injuries. *Ibid*. He also noted that the ulnar nerve originates in the neck and the nerve roots, primarily at the C5, C6, and C7 levels, exit the neck through the area at the base of the neck and armpit, collectively referred to as the thoracic outlet, down the inside of the arm through the elbow and onto the hand on the small finger side. *Id*. at 13-14. He also testified that the ulnar nerve is the nerve most frequently afflicted with double crunch syndrome. *Ibid*.

After his initial evaluation of Claimant, Dr. Cherry referred her to Dr. Daniel Moalli for nerve conduction studies and EMG's. CX 10 at 2. A November 13, 1995 report of Dr. Moalli's studies noted an impression of bilateral carpal tunnel syndrome and right ulnar neuropathy at the elbow. CX 8.

Dr. Cherry saw Claimant again on November 27, 1995, and noted that Dr. Moalli's report reflected "no evidence [of] trapezial or other thoracic outlet level obstruction or restriction." CX 10 at 4. He opined that the symptoms Claimant reported with respect to "both the Carpal Tunnel and Cubital Tunnel are the same as she first reported in April of 1993 and have persisted and worsened through the present time and consequently in turn are in all medical probability arising directly and causally out of her work at Electric Boat from 1988 through June of 1994." *Ibid*. Dr. Cherry recommended proceeding with surgery involving the subcutaneous transposition of the right ulnar nerve at the elbow, release of the right carpal tunnel, and release of the Canal of Guyon at the wrist. *Ibid*. On March 6, 1997, Dr. Cherry referred Claimant for physical therapy for the upper shoulder girdle. *Id*. at 7.

Another nerve conduction study by Dr. Moalli on June 18, 1997 noted an impression of bilateral carpal tunnel syndrome and no evidence of a root compression. CX 9. Dr. Cherry interpreted the report as indicative of "resolution of the ulnar neuritis at the elbow but persistent carpal tunnel." CX 10 at 8. He further noted that Claimant was seeing Dr. Daniel Gaccione for the problems with her neck. *Ibid*. A November 6, 1997 treatment note by Dr. Cherry reflects

"ongoing and likely increasing or at least cyclically worsened symptoms at the neck giving a double crunch syndrome." *Id*. at 11. A March 19, 1998 treatment note similarly reflects "neck – base of neck – shoulder area symptoms radiating down into the elbow and arm are persisting [and] if anything increasing." *Id*. at 14. At that time, Dr. Cherry rated Claimant 22% permanently partially disabled with respect to her right upper extremity as a whole "exclusive of the more proximal problems arising at the thoracic outlet – cervical spine – neck and shoulder levels which currently are more disabling and significant to her." *Id*. at 15 (underlining in original). He opined that Claimant's neck and shoulder problems "are at least currently limiting her from even . . . relatively limited vocational pursuits [involving light clerical work]." *Ibid*. A September 24, 1998 treatment note reflects "a neck or shoulder level problem which radiates down into the dorsal radial forearm and on into the hand and may well represent a suprascapular compression syndrome." *Id*. at 17.[4] Dr. Cherry subsequently noted that a lateral epicondylectomy-radial nerve decompression would be appropriate but believed Claimant's continuing neck and shoulder problems were "more pressing and should take precidence [sic] at least until a definitive diagnosis can be made." *Id*. at 18. A September 30, 1999 note states that Claimant was continuing to have further difficulty at the cervical spine and "possibly thoracic outlet level." *Id*. at 22. Dr. Cherry opined that Claimant had a 20% permanent partial disability to the right upper extremity but again stressed that that rating was exclusive of other problems, particularly Claimant's lateral epicondylitis and radial tunnel syndrome. *Ibid*. With respect to her neck problems, Dr. Cherry said they were "outside my area of treatment and area of expertise, [and] I cannot comment further save that these are areas of complaint and problems from the time that I fist saw her in 1995." *Ibid*. He further wrote:

> I would like and do think that she should have the EMG studies to determine if there is any proximal level radiculopathy or other problems in the neck-thoracic outlet or, in short, proximal to the areas of my treatment, and prior to proceeding with any further interventions. She is in accord with this and insofar as I can tell on the review, these were complaints present from the onset and by history back to the time of her employment at Electric Boat.

Ibid. There are no further statements in Dr. Cherry's treatment records with respect to the etiology of Claimant's neck and shoulder complaints.

Dr. Daniel Gaccione saw Claimant from 1997 through 2000 after she was referred to him by Dr. Cherry. CX 13. A July 14, 1997 letter from Dr. Gaccione to Employer's insurance adjuster notes work restrictions with respect to her neck and shoulder condition which, *inter alia*, excluded repetitive overhead activity, pushing, pulling, or climbing. *Id*. at 4. However, an August 6, 1997 treatment note from Dr. Gaccione reflects that Claimant "has had a negative work up previously including a [cervical] spine MRI which showed some changes in the spinal cord from C2-C6, but no distinct [herniation] . . . . no evidence of cervical radiculopathy on her nerve studies . . . . patient has pain on a daily basis and remains disabled from working because

[4] Dr. Cherry testified during his deposition that a suprascapular compression syndrome is very rare and involves the pinching of a nerve which comes out through the notch of the scapular at the top of the shoulder and can cause "very vague symptoms on down the arm; and it can be mimicked or confused with the radial tunnel syndrome." CX 22 at 36.

of pain." *Id*. at 5. A letter to Claimant's attorney dated March 25, 1998 notes with respect to his treatment of Ferraro since February 1997:

> She has been very compliant in following my instructions on various rehabilitation programs, but despite this, she continues to have pain on a daily basis related to her neck and upper extremity conditions. She remains disabled at this time due to her ongoing surgical treatment by Dr. Thomas Cherry, as well as the other conditions noted above.

Id. at 10. Reports of examination by Dr. Gaccione from August 1997 through June 14, 2000 consistently reflect chronic neck pain with no indication of causation. *Id*. at 7-16.

Dr. Maletz first examined Claimant on November 27, 2000. *Id*. at 5, CX-17. He agreed with Dr. Cherry's opinion that repetitive trauma is often considered a known causative factor in double crush syndrome. *Id*. at 10. He further agreed that someone who had damage to the nerve in the carpal tunnel area would be more susceptible to injury of the nerve in the upper extremity. *Id*. at 13. Dr. Maletz specifically characterized Claimant's symptoms as resulting from "ergonomically-related repetitive microtrauma." *Id*. at 15. His diagnosis of Claimant after two years of treatment was "multilevel cervical degenerative disk disease with a protruded C5-6 disk[,] . . . thoracic outlet compression, bilaterally, and subscapularis tendonitis . . . ." *Id*. at 46. He believed, based on a reasonable degree of medical probability, that Claimant's work activities at Electric Boat during the period 1988 to 1993 were "causative" of her problems. *Id*. at 45-46.

Dr. Mariorenzi, unlike Ferraro's treating physicians, saw Claimant on only one occasion in November 2002. EX 15. Based on his examination, he opined that Ferraro had made a full recovery from her wrist and elbow problems, that she had no functional impairments, and that she was capable of returning to work without any restrictions or limitations. *Id*. at 12-14. He did not believe that thoracic outlet syndrome could result from repetitive trauma of the sort experienced by Claimant at work, and testified that a "bona fide study such as an EMG" was necessary to substantiate such a diagnosis. *Id*. at 14-15. Since neither the 1997 nor the 2000 MRI obtained by Dr. Gaccione showed nerve root compression, it was Dr. Mariorenzi's opinion that Claimant did not have double crush syndrome. *Id*. at 16-17. He did not examine Claimant for thoracic outlet syndrome because he did not think she had thoracic outlet syndrome. *Id*. at 42. Dr. Mariorenzi stated that signs he would expect to see in the presence of thoracic outlet syndrome included, *inter alia*, vascular abnormalities, coldness in the extremities, and blanching in the extremities if there were sufficient pressure on the subclavian artery, *Id*. at 37-38. He did not explain how Claimant's reports of her right upper extremity tingling and "falling asleep," as well as feeling "cold and achy," *see*, *e.g.*, CX 8, CX 9, CX 10, CX 13, CX 15, CX 24 at 25-26, were inconsistent with a diagnosis of thoracic outlet syndrome. He similarly acknowledged that "[y]ou might get some referred symptoms proximally . . . [including] complaints of *pain* proximally but all the changes have to be from where the nerve is pinched distal[ly]." *Id*. at 49 (italics added). He did not explain how Claimant's complaints of neck and shoulder *pain*, *see*, *e.g.*, CX 7 at 3, CX 16, CX 17, EX 1, EX 2, were inconsistent with a pinched nerve "distally," *i.e.*, further down the arm, such as the elbow or wrist.

A longitudinal review of records from Claimant's treating physicians makes clear that Ferraro has had ongoing, persistent complaints of pain in her neck and right shoulder from the time she left her employment at Electric Boat up to the present. None of these physicians have ever suggested that Claimant's complaints of neck and shoulder pain were not real or were being magnified for purposes of monetary gain. Dr. Cherry, who treated Claimant over a seven year period and is board-certified in both hand surgery and plastic surgery, testified that repetitive activity of the type in which Claimant was engaged while working at Electric Boat is frequently associated with double crunch injuries. He further testified the ulnar nerve is the nerve which is most commonly afflicted with that syndrome, and he continued to diagnose Claimant with "ongoing and likely increasing or at least cyclically worsened symptoms at the neck giving a double crunch syndrome" after having reviewed, *inter alia*, the reports of the two nerve conduction studies performed by Dr. Moalli. CX 10 at 11. Similarly, Dr. Gaccione treated Claimant for her neck and shoulder symptoms from February 1997 through June 2000 and noted that she was "very compliant in following [his] instructions on various rehabilitation programs" but continued to experience pain in her neck and shoulder on a daily basis. CX 13 at 10. Dr. Gaccione reviewed a variety of test reports, including MRI's and EMG's, and never questioned the validity of Claimant's ongoing symptoms. Dr. White assessed Claimant on February 15, 2000, found positive impingement signs in the right shoulder, and noted than any motion or contraction of Claimant's right elbow aggravated her neck pain. EX 2. Dr. Maletz began treating Claimant in November 2000, conducted a thorough review of her medical records, including MRI's and EMG's, and concluded within a reasonable degree of medical certainty that Ferraro's neck and shoulder complaints stemmed from her work activities at Electric Boat.

The opinions of a Claimant's treating physicians are entitled to "great weight." *Pietrunti v. Director, OWCP*, 119 F.3d 1035, 1043 (2nd Cir. 1997). Given the fact that Dr. Maletz, like Dr. Mariorenzi, is a board-certified orthopedic surgeon, he is at least as qualified as Dr. Mariorenzi to render an opinion on Claimant's condition with respect to the nature and etiology of her persistent neck and right shoulder problems. Furthermore, Dr. Cherry is board-certified in hand and plastic surgery, and both he and Dr. Maletz treated Claimant on multiple occasions over an extended period with respect to her ongoing problems. Both physicians testified, contrary to Dr. Mariorenzi's opinion, that the type of activity in which Claimant engaged while working for Electric Boat could cause thoracic outlet syndrome. Both physicians, unlike Dr. Mariorenzi, confirmed ongoing symptoms which would preclude Claimant from returning to work despite the lack of specific findings on objective medical tests. Dr. Maletz, contrary to Dr. Mariorenzi, found Claimant's neck and right shoulder injury work-related and opined that she was unable to work. In light of the qualifications of Claimant's treating physicians, the length of time during which they treated Ferraro, and their overall knowledge of Claimant's medical history and treatment by other physicians, I accord their opinions greater weight than the opinion of Dr. Mariorenzi. I thus find that Claimant's neck and right shoulder injuries arose out of and in the course of her employment with Electric Boat.

B. Total Disability.

Once a claimant establishes that he or she has sustained a work-related injury which prevents a return to the claimant's prior employment, he or she is considered totally disabled unless or until the claimant's employer establishes the availability of suitable alternative

employment. *Pietrunti v. Director, OWCP*, 119 F.3d 1041. Total disability is defined as a complete incapacity to earn pre-injury wages in the same work as at the time of injury or in any other employment. The Claimant has the initial burden of proving total disability, and to establish a *prima facie* case, the claimant must show that he or she cannot return to his or her regular or usual employment due to a work-related injury. *See, e.g., Gacki v. Sea-Land Service, Inc.,* 33 BRBS 127 (1998). Once the claimant meets that burden, the burden shifts to the employer to demonstrate the existence of suitable alternate employment. *Mills v. Marine Repair Serv.*, 21 BRBS 115 (1988), *modified on other grounds on recon.*, 22 BRBS 335 (1989). The same standard applies whether the claim is for permanent or temporary total disability. *Id*. Even a minor physical impairment can establish total disability if it prevents the employee from performing his or her usual employment, *Elliot v. C & P Tel. Co.*, 16 BRBS 89, 92 at n.4 (1984), or from performing the only kind of employment for which he or she is qualified. *Equitable Equip. Co. v. Hardy*, 558 F.2d 1192, 6 BRBS 666 (5th Cir. 1977), *vacating on other grounds* 3 BRBS 426 (1976).

The only physician who has opined that Claimant is able to return to her former employment is Dr. Mariorenzi. However, as noted above, Dr. Mariorenzi's determination is based on his conclusion that Claimant has reached maximum medical improvement and has no functional impairments. Since that conclusion is inconsistent with the opinions of Claimant's treating physicians, Dr. Mariorenzi's opinion with respect to Claimant's ability to return to her former job is similarly rejected.

Donna White is a vocational rehabilitation case manager hired by Employer to prepare an updated labor market survey. EX-16. When preparing her labor market survey, White relied only on Dr. Mariorenzi's medical opinion that Claimant was capable of returning to her usual type of work with no restrictions or limitations in determining what jobs would be available. *Id*. at 30-32. She identified eleven positions that she considered suitable for Claimant including front desk or reservations clerk at local hotels and office clerk or receptionist at area businesses. *Id*. at 8-20. She relied on the Dictionary of Occupational Titles to determine the physical demands of particular jobs. *Id*. at 33. She informed each of the prospective employers she contacted that Claimant had no restrictions based on Dr. Mariorenzi's report, but "took into account, you know, that she may have some difficulty doing repetitive tasks based on [Claimant's] own assessment." *Id*. at 35. She did not personally visit any of the prospective employers, and she had no knowledge of their hiring criteria other than what she was told by them when she called. *Id*. at 55.

Carl Barchi first met Claimant in October 1997 when he was assigned by the Department of Labor to prepare a vocational rehabilitation plan for her. CX 24 at 6-7. Prior to completing his initial assessment report in October 1997, he obtained her work history and contacted her treating physicians. *Id*. at 7-8. Because of her hand surgery in January 1998, he placed Claimant's file in "interrupted status" in March 1998. *Id*. at 11. Barchi met with Claimant again in March 2003 at the request of her attorney. *Id*. at 12. He reviewed recent medical reports from treating doctors, as well as an independent medical report, and he asked Claimant to report on her own perceptions of her limitations. *Id*. at 15. He was aware through Dr. Maletz that Claimant had undergone five surgeries to the right upper extremity beginning in 1996 and that she had received steroid injections which were unsuccessful in reducing her neck pain. *Id*. at 17.

As a vocational counselor, he determined that he should ignore Dr. Mariorenzi's report stating Claimant had made a "full and complete recovery" and could return to her former employment "with no restrictions and no limitations." *Id*. at 21. Instead, he relied on reports of the treating physicians in determining whether Claimant was employable because Dr. Mariorenzi's report was "so diametrically opposed, and it shocked me to see that at that particular time." *Id*. at 22. He reviewed both labor market surveys prepared by Donna White and disagreed with the conclusions reached by White in her March 3, 2003 survey. *Id*. at 24. The report failed to consider the effects of Claimant's reported limitations on her employability including that her right hand falls asleep, that it felt cold and achy, that both hands were weak, and that she had pain in the region of her right wrist. *Id*. at 25-26. Nor did the report consider the fact that Claimant did not possess any readily marketable transferable skills in light of the fact that she had been out of the job market for the preceding seven or eight years. *Id*. at 26-27. He also noted with respect to the jobs identified by White that "[t]he USDOL's Selected Characteristics of Occupations in the DOT require repetitive and frequent reaching, handling and fingering – all of which Mrs. Ferraro's conditions preclude." *Id*. at 28-29. Based on his review of the medical reports, the labor market survey done by White, and his meeting with Claimant, Barchi concluded that Ferraro had no vocational potential or reasonable expectation of being able to work competitively in the near future. *Id*. at 30.

I find that the vocational opinion of Carl Barchi is more thorough, better reasoned, and more consistent with the view of Claimant's physical limitations I have outlined above. I thus find that Employer has failed to establish that Claimant is capable of returning to her former employment, or that there is suitable alternate employment which she can perform. Based on these findings, I therefore find that Claimant is totally disabled.

Although not specifically authorized in the Act, it has been accepted practice that interest at the rate of six percent per annum is assessed on all past due compensation payments. *Avallone v. Todd Shipyards Corp*., 10 BRBS 724 (1978). The Benefits Review Board and the federal courts have previously upheld interest awards on past due benefits to ensure that the employee receives the full amount of compensation due. *Santos v. General Dynamics Corp*., 22 BRBS 226 (1989); *Adams v. Newport News* Shipbuilding, 22 BRBS 78 (1989); *Smith v. Ingalls Shipbuilding*, 22 BRBS 26, 50 (1989); *Caudill v. Sea Tac Alaska Shipbuilding*, 22 BRBS 10 (1988); *Perry v. Carolina Shipping*, 20 BRBS 90 (1987); *Hoey v. General Dynamics Corp*., 17 BRBS 229 (1985); *Watkins v. Newport News Shipbuilding & Dry Dock Co.*, 8 BRBS 556 (1978), *aff'd in pertinent part and rev'd on other grounds sub nom*. *Newport News v. Director, OWCP*, 594 F.2d 986 (4th Cir. 1979). The Board has stated that inflationary trends in our economy have rendered a fixed six percent rate no longer appropriate to further the purpose of making claimants whole, and held that "the fixed six percent rate should be replaced by the rate employed by the United States District Courts under 28 U.S.C. § 1961 (1982). This rate is periodically changed to reflect the yield on United States Treasury Bills . . . ." *Grant v. Portland Stevedoring Company*, 16 BRBS 267, 270 (1984), *modified on reconsideration*, 17 BRBS 20 (1985). Section 2(m) of Pub. L. 97-258 provided that the above provision would become effective October 1, 1982. This Order incorporates by reference this statute and provides for its specific administrative application by the district director. The appropriate rate shall be determined as of the filing date of this Decision and Order with the district director.

ORDER

On the basis of the foregoing, IT IS HEREBY ORDERED that:

A. Employer Electric Boat shall pay Claimant temporary total disability compensation benefits and interest from April 22, 2001 through the date of this order based on an average weekly wage of $337.96.

B. Employer Electric Boat shall receive credit for all amounts of compensation previously paid to Claimant as a result of her work-related injuries identified herein.

C. Employer Electric Boat shall pay to Claimant all medical benefits to which she is entitled under the Longshore and Harbor Workers' Compensation Act.

D. Employer Electric Boat shall pay to Claimant's attorney fees and costs to be established by supplemental order.

E. The district director shall perform all calculations necessary to effect this order.

SO ORDERED.

A

STEPHEN L. PURCELL
Administrative Law Judge

Washington, D.C.